TOPOGRAPHIC SURVEY CONTROL POINT RECORD

STATION LONG NAME	MU22	
STATION NUMBER	MU22	
4 CHAR ID	MU22	
COUNTRY	IRAQ	
LOCATION	AL MUTHANA	
SURVEYING AGENCY	IGRS	
DATE (OF DESCRIPTION)	04 JULY 20 05	

CONTENTS	YES	NO	NO OF PAGES
FIELD COORDINATE VALUES	Х		1
OFFICE COORDINATE VALUES	Х		1
STATION MONUMENT & SITE DETAILS	Х		1
STATION DIAGRAM	Х		1
ACCESS MAP	Х		1
ACCESS DESCRIPTION	Х		1
APPROACH PHOTOGRAPHS	Х		1
CARDINAL POINT PHOTOGRAPHS	Х		2

RECORD OF VISITS

DATE OF VISIT	NAME	UNIT	REMARKS

ADDITIONAL DETAILS/ENCLOSURES

CONTENTS	NO OF PAGES

FIELD COORDINATE VALUES

STATION LONG NAME	MU22
4 CHAR ID	MU22
STATION NUMBER	MU22

THIS STATION IS NEW	YES
NEARLY IDENTICAL WITH	N/A

FIELD VALUES FROM THE RECEIVER / HAND HELD GPS – IN WGS84

LATITUDE N	31°31'33.11"	
LONGITUDE E	45°11'18.32"	
HT (M)	+ 13	
GRID ZONE DESIGNATOR	38R	
MGRS GRID	38R NV 17889 87899	
SURVEYING AGENCY	IGRS	

FIELD INPUT BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JULY 2005
FIELD CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JULY 2005

PAGE 1 OF 9

OFFICE COORDINATE VALUES

WGS 84 ADJUSTED VALUES AS AT: 25 Aug 05

LATITUDE N	31° 31' 33.38943''	
LONGITUDE E	045° 11' 18.09055''	
SPHEROIDAL HT (M)	7.193	
EGM96 GEOID MODEL HT (M)	-7.353	
ORTHOMETRIC HT (M)	14.546	
VERTICAL DATUM	WGS 84	
GEOID MODEL USED	EGM 96	
RELATIVE TO	CORS STATIONS	
RELATIVE POSITION ACCURACY (M)	0.059	
RELATIVE HEIGHT ACCURACY (M)	0.069	
ADJUSTING AGENCY	OPUS	
ADJUSTMENT DATE	25 AUG 2005	

LOCAL DATUM VALUES AS AT: 25 Aug 05

CDUEDOID	NI/A
SPHEROID	N/A
PROJECTION	N/A
GRID	N/A
VERTICAL DATUM	N/A
LATITUDE N/S	N/A
LONGITUDE E/W	N/A
EASTINGS (M)	N/A
NORTHINGS (M)	N/A
SPHEROIDAL HT (M)	N/A
ORTHOMETRIC HT (M)	N/A
GRID ZONE DESIGNATOR	N/A
TRANSFORMATION AGENCY	N/A
TRANSFORMATION DATE	N/A

GRAVITY VALUE: N/A	TYPE OF STN: I	N/A REF: N/A	
AIR PHOTO: N/A	REF: N/A	SCALE: N/A	
IMAGERY: N/A	REF: N/A	SCALE: N/A	

OFFICE INPUT BY: LCPL COWARD	UNIT: IGRS	DATE: 25 AUG 2005
OFFICE CHECKED BY: LCPL DICKEN	UNIT: IGRS	DATE: 25 AUG 2005

STATION MONUMENT AND SITE DETAILS

STATION LONG NAME: MU22

STATION NUMBER: MU22 4 CHAR ID: MU22

LOCATION: AL MUTHANA COUNTRY: IRAQ

STATION ADDRESS: IRAQI ARMY BKS

AR RUMAYTHAH

TEL:N/A FAX: N/A

LAND OWNER ADDRESS: N/A

TEL: N/A FAX: N/A

TYPE OF MARK: HARN

CONDITION: GOOD

MARK SETTING:FINE POINT ON REBAR NO OF REBARS: 5

MONUMENT PHOTO / SKETCH

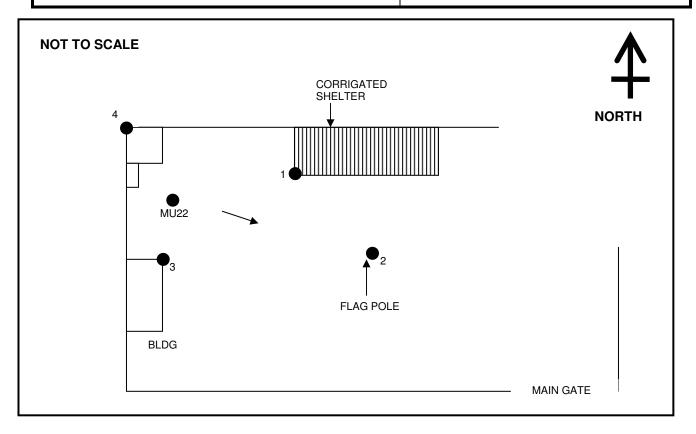


PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JULY 2005
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JULY 2005

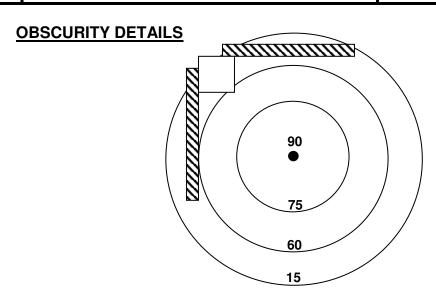
PAGE 3 OF 9

STATION DIAGRAM

STATION LONG NAME: MU22
STATION NUMBER: MU22
4 CHAR ID: MU22



NO	DESCRIPTION	BRG/HORZ ANGLE	DISTANCE(M)
1	SW UPRIGHT OF CORRIGATED SHELTER	290°	21
2	FLAG POLE	310°	50
3	NE CORNER OF BLDG	14°	24
4	NE CORNER OF COMPOUND	176°	8

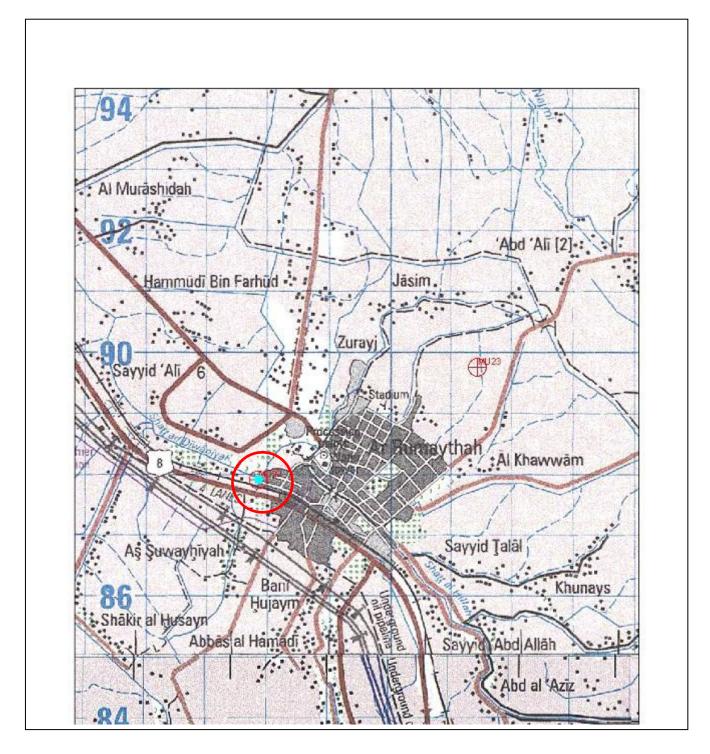


PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JUL 2005
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JUL 2005

ACCESS MAP

STATION LONG NAME: MU22
STATION NUMBER: MU22
4 CHAR ID: MU22

MAP DETAILS	SERIES: K643	SHEET: 5053
EDITION: 2-NIMA	SCALE: 1:100,000	GR: 38R NV 17889 87899



PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JUL 2005
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JUL 2005

ACCESS DESCRIPTION

STATION LONG NAME: MU22
STATION NUMBER: MU22
4 CHAR ID: MU22

MAP DETAILS	SERIES: K643	SHEET: 5053
EDITION: 2-NIMA	SCALE: 1:100,000	GR: 38R NV 17889 87899

FROM GR 38R NV 265 610 TURN NORTH EAST ONTO METALLED ROAD FOR APPROXIMATELY 3KM. JOIN MAIN ROAD AT GR 38R NV 305 605. HEAD NORTH WEST FOR APPROXIMATELY 32KM. AT GR 38R NV 1863 8733 TURN NORTH EAST FOR 150M TO JUNCTION AT GR 38R NV 1871 8751 TURN LEFT AND HEAD NORTH WEST FOR APPROXIMATELY 650M TO IRAQI ARMY COMPOUND.

PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JUL 2005
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JUL 2005

PAGE 6 OF 9

APPROACH PHOTOGRAPHS

STATION LONG NAME: MU22

STATION NUMBER: MU22 4 CHAR ID: MU22

NEAR APPROACH FACING NORTH



FAR APPROACH FACING NORTH



TAKEN BY: SPR LOCKHART DATE TAKEN: 04 JULY 05

PAGE 7 OF 9

REVISION DATE: 05 FEB 98 TOPO FORM 01h

CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU22

STATION NUMBER: MU22 4 CHAR ID: MU22

NORTH



SOUTH



TAKEN BY: SPR LOCKHART DATE TAKEN: 04 JULY 2005

CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU22

STATION NUMBER: MU22 4 CHAR ID: MU22

EAST



WEST



TAKEN BY: SPR LOCKHART DATE TAKEN: 04 JUL 2005